## **CLAIMS:**

1. A method for distributing both IP signals and non-IP signals in an Ethernet based network, wherein the Ethernet based network comprises UTP cabling comprising a number of wires, the method comprises distributing said non-IP signals through a signal path based on wires comprised in said cabling and not being used for distributing said IP signals.

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- 2. A method according to claim 1, wherein an adaptation is performed on either said signal path or said non-IP signals before distributing said non-IP signals on wires comprised in said cabling.
- 10 3. A method according to claim 2, wherein an adaptation performed on said signal path comprises adapting the impedance of said signal path.
  - 4. A method according to claim 3, wherein said adaptation is achieved by active adaptation of the signal propagation by control of driver strength.

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5. A communication system for distributing both IP signals and non-IP signals in an Ethernet based network, wherein the communication system comprises UTP cabling comprising a number of wires, where the wires comprised in said cabling, which are not being used for IP signals, are adapted for distributing said non-IP signals.

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- 6. A communication system according to claim 5, wherein said system comprises means for performing an adaptation on either said signal path or said non-IP signals before distributing said non-IP signals on wires comprised in said cabling.
- 7. A communication system according to claim 6, wherein said means for performing an adaptation on either said signal path or said non-IP signals comprise means for adapting the impedance of the signal path for distributing said non-IP signal.

- 8. A communication system according to claim 7, wherein said means for adapting the impedance of the signal path for distributing said non-IP signals comprise means for performing active adaptation of the signal propagation by control of driver strength.
- 5 9. A communication system according to claim 5-8, wherein the system comprises a gateway, said gateway being adapted for:
  - receiving non-IP signals,
  - performing an adaptation on either said signal path or said non-IP signals before distributing said non-IP signals on wires comprised in said cabling,
- 10 transmitting said processed non-IP signals via the Ethernet based network.
  - 10. A communication system according to claim 5-9, wherein the system comprises a router, said router being adapted for routing the non-IP signals, enabling the non-IP signals to be broadcasted to all end points in the Ethernet network.

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- 11. A communication system according to claim 5-10, wherein the system comprises a switch, said switch being adapted for:
- transmitting said non-IP signals,
- switching between said non-IP signals and said IP signals.

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- 12. A gateway adapted to be used in a communication system according to claim 6, wherein the gateway is adapted for:
- receiving non-IP signals,
- performing an adaptation on either said signal path or said non-IP signals 25 before distributing said non-IP signals on wires comprised in said cabling,
  - transmitting said processed non-IP signals via the Ethernet based network.
- 13. A router to be used in a communication system according to claim 6, said router being adapted for routing the non-IP signals enabling the IP signals to be broadcasted to all end points in the Ethernet network.
  - 14. A switch to be used in a communication system according to claim 6, wherein said switch is adapted for:
  - transmitting said non-IP signals,

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switching between said non-IP signals and said IP signals.